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AUTHOR Kates, Jack
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ABSTRACT

In order to compile a population profile of actual writing skills demonstrated by first-semester freshman composition students during the opening and closing weeks of their courses, a pre- and post-test survey was made of 16 classes of freshmen among eight community colleges and three universities in the greater Los Angeles area. Theses and support essay tests were written by 486 students, 285 of whom returned for the post-test. Grading criteria were based upon four equally weighted items: content, organization, mechanics, and sentence structure (including diction). Each item was graded on the stanine (standard scale of nine), and the grades were then averaged for a composite stanine score--the final score--which was used for both individual and group comparisons. Results showed that the universities, because of their more rigid screening procedures, scored considerably above the norm on the pre-test gross. UCLA headed the list. The post-test results were based on the two-tail test, which included only those scores from students who had taken both the pre- and post-tests. Again UCIA headed the list. The universities as a group scored 1.22 stanines above the community colleges as a group; however, the colleges achieved both a greater stanine gain (1.89) than did the universities (1.4), and their results had a greater level of probability. Groups exhibiting the greatest gains were generally those which had been fairly small and had received extensive, individualized essay writing assignments in their courses. The survey indicates that placement tests and remedial courses as related to English composition leave much to be desired. (DB)

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REPORT ON THE KATES SURVEY

OF COLLEGE FRESHMAN COMPOSITION WRITING SKILLS:

Sixteen First-Semester Freshman English Composition Classes

From Eleven Community Colleges and Universities

JC 730 136

by Jack Kates

June 1973

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I would like to express my sincerest gratitude to all of the instructors, department heads, division heads, and administrators who cooperated so generously in this survey. They represented the following community colleges and universities: California State University at Long Beach, Compton College, Cypress College, El Camino College, Fullerton College, Golden West College, Los Angeles Southwest College, Orange Coast College, University of California at Los Angeles, University of Southern California, and West Los Angeles College.

In particular I would like to thank Mrs. Anna Marie Thames for arranging the use of the computer services at Golden West College, Mr. Richard L. Mercer for computing the results of the data on the composite scores, and Dr. Gerald Garlock of El Camino College for his invaluable help with my previous research leading up to this study and for his explanation of the data.

Most of all I am indebted to the students who wrote the essays which I graded for this survey and who, therefore, are the real participants of this study. I am very proud to have had the honor of testing them, and I hope that all of our efforts in this survey will contribute toward the betterment of education.

I. INTRODUCTION

During his numerous years of teaching writing at both the high school and college level, this researcher has noticed a rather low correlation between objective tests designed to place students in appropriate English composition classes and the actual writing ability displayed by the individual student. It seems obvious that one's ability to guess the "correct" or "most nearly correct" answer to multiple choice questions involving word connotations has nothing to do with one's ability to write an organized essay. Even the questions that pertain to the recognition of grammatical errors, errors not necessarily committed by the student, are hardly reliable indicators of the student's ability to organize his thoughts and communicate them on paper. In short, the logic of the claims of objective placement tests leaves much to be desired. Consequently, this researcher has made it a practice to challenge the reliability of objective tests by always administering essay tests to his students during their first week in class. The results of these essay tests have enabled him to diagnose his students' strengths and weaknesses in expository composition with a considerable degree of accuracy, far exceeding that of the objective placement tests. A further result of his testing has been the placement of some students into either more advanced courses or more preparatory courses than the ones they had been programmed into originally by the objective tests, particularly so at the college level.

As his testing evolved into what he considered a science, he was able to perform several experiments at various colleges, the results of which enabled him to compare achievements not only between two classes at the same college but among various colleges as well. These achievements were based upon mean group pre-test and post-test scores, that is, entering group scores for a common essay question compared to the scores achieved by the same groups on a similar essay question administered toward the end of the semester. By the summer of 1972 this researcher had acquired accurate statistical data on the achievements of four classes at two different community colleges. The data indicated that there was a significant difference in writing abilities between entering first-semester freshmen at one college and the writing abilities of second-semester freshmen at another college. Contrary to what one might have imagined the results would be, the first-semester freshmen at one college were writing at a considerably and significantly higher level than were the second-semester freshmen at the other college. In short, there was a rather obvious difference of performance and standards between the two colleges, despite the fact that the course outlines at both colleges were very similar in content.

If such a variation occurred between two community colleges, what might a larger population profile disclose?--that is, a profile including entering freshmen among major universities as well as colleges? Consequently, this survey to be described is an outgrowth of his previous curiousity and experimentation.

II. PROBLEM

The problem was to compile a broad population profile of expository writing skills evident among entering first-semester freshmen during their first or second week in transfer credit courses at various California community colleges and universities. This profile would reflect significant differences, if any, in the students' actual writing skills based on a common essay test administered and graded under rigidly controlled conditions. The profile would also reflect any differing entrance standards among the community colleges, among the universities, and between the colleges as a whole and the universities as a whole. If the pre-test were successful, and if the researcher received the cooperation of the participating instructors and their administrators for a post-test, he would then conduct a post-test toward the end of the semester or quarter and thereby compute the actual gains of the students involved in the survey, gains which might then reflect the actual achievement in writing skills of individual classes and of groups as a whole.

Thus, the pre-test and post-test survey of writing skills might reflect not only a population profile of writing skills among various community colleges and universities at the beginning of the freshman course, but also a profile of their skills at the conclusion of the course, as well as a profile of the gains or achievements in writing skills obtained during a specific number of weeks of instruction.

III. SIGNIFICANCE

If such a study could be conducted on a massive scale under rigidly controlled conditions, there might then be generally available for research purposes, probably for the first time, data on the actual writing skills of freshmen at both the community college and university levels. This data might serve numerous purposes, not the least of which might reflect the range of actual expository writing abilities evident among college and university freshmen. The data might also serve to validate or repudiate the reliability of objective placement tests for English composition courses, as well as the reliability of remedial courses preparatory for freshman composition. In short, the data might serve a multiplicity of purposes both for research in general and for specific evaluations of writing skills achievement among students, among groups, and among schools.

IV. HYPOTHESIS

It was hypothesized that there would be a significant range of achievement evident among the various groups in both the pre-test and post-test. This range would reflect the various entrance standards required for the course among the various schools. Those schools, namely the universities, which maintained rigid entrance standards would reflect these standards in their high pre-test scores. Conversally, the community colleges, which had lower entrance standards, including an open door policy in one case, would score significantly lower in the pre-test than would the universities.

It was further hypothesized that the schools whose enrollments consisted mainly of students from minority groups who were culturally and economically deprived would not achieve as well on the pre-test as would those students from comparatively affluent neighborhoods. Finally, it was hypothesized that toward the end of the course, by the time the post-test was administered, there would be a higher droupout rate among very low achieving students than there would be among high achieving students, a dropout rate which might reflect the lack of preparation for the course by the student, the large class size with its resultant lack of intimacy between student and instructor, and the rigidness of the course itself.

For the post test it was hypothesized that there would be a gain evident among all classes, a gain which might be directly proportional to three factors: one, the amount of expository writing required for the course; two, the amount of individual conferencing received by the student from his instructor; and three, the intimacy of the class itself and its limited size.

V. METHOD

The survey was designed to include seventeen classes of first-semester freshmen English composition students among twelve colleges and universities. Such a sample was designed to reflect a cross section of the freshman population at both the college and university level in the greater Los Angeles area. The sample therefore included groups from community colleges in both Los Angeles and Orange counties, as well as groups from three major universities, including a private university, a member of the

University of California system, and a member of the California State University system.

Prior to and during the first week of the fall semester or quarter, the researcher contacted the administrators in charge of the teaching of freshman composition at their schools and made arrangements for a pre-test to be administered by him to a particular class or classes at that school. Because of his busy teaching schedule, the researcher was unable to administer the test personally at two schools: a state college, which was later disqualified from the survey because of conditions which were not scientifically controlled; and a community college, which was included in the survey since its instructor cooperated fully and administered the test herself the same day it was received. The survey, therefore, included sixteen classes among eleven community colleges and universities. The groups, listed alphabetically, were as follows: California State University at Long Beach, Compton College(Groups A and B), Cypress College, El Camino College(Groups A, B, and C), Fullerton College, Golden West College(Groups A and B), Los Angeles Southwest College(Groups A and B), Orange Coast College, University of California at Los Angeles, University of Southern California, and West Los Angeles College. Five of the groups were extended day or evening classes: Compton(A and B), Fullerton, and Los Angeles Southwest(A and B). The remaining groups were all day classes whose hours were conducted fairly evenly from 8:AM to 3:PM.

All classes were selected by the researcher through random chance. Participating division heads generously accomodated the researcher by offering him classes to test at his convenience. In most cases the participating instructors had learned of the survey two or three days ahead of the testing date and had volunteered their classes; however, in some night classes which met only once a week, the instructors had no prior knowledge of the survey, yet they cooperated most graciously.

Except for one class at Orange Coast College, where there were no prerequisites for the course, all classes had been screened by the various schools for eligibility for the transfer course. Screening procedure varied--and still varies greatly--among the schools. The University of California at Los Angeles, for example, admits only the top one-fourth of the high school graduates as freshmen. Furthermore, these freshmen must then take an objective placement test and score in the upper percentiles in order to qualify for the transfer course. A similar but less rigorous procedure was followed by the University of Southern California during the survey; however, a certain percentage of minority group students were allowed into the transfer courses regardless of their high school and placement scores. California State University at Long Beach accepts only the top one-third of the high school graduates, all of whom are then eligible (theoretically) for the transfer course. The theory is that there is a high correlation between one's high school grades and one's competence at writing. Quite frequently, however, after the instructor has given his class a writing assignment, he finds no such correlation and strongly suggests that the student deficient in basic writing skills make

up his deficiency by taking a remedial class at another school, since such remedial courses are no longer offered at the state university. By contrast, entrance requirements at the community colleges are considerably more relaxed. The community colleges maintain an open door policy and admit anyone with a high school diploma regardless of his grade point average, or anyone without a high school diploma so long as he is at least eighteen years of age and a resident of California. Most of the community colleges, however, do require the student to take an objective placement test--of one form or another--in order to qualify for the transfer course. Prerequisite percentile scores on these tests vary from school to school as do the tests themselves, and if the student does not score high enough, he need only take a remedial course at that school and pass it with a grade of "C" or better in order to gain admittance to the transfer course.

Remedial courses, however, vary considerably in their emphasis on writing. Some instructors require weekly writing assignments of paragraph length or more, while other instructors require almost no writing at all but instead concentrate on spelling, punctuation, grammar, or vacabulary. Consequently, some students who have passed these courses may have achieved a certain competence in writing, while others have virtually no such competence. It is not unusual to find a student who has been processed through a remedial course and who can name all the parts of speech in traditional grammar but who can not write two unified sentences. Nor is it unusual to find a student who writes with a very high degree of competence but who does not know the parts of speech or the connotation of certain words and has therefore been programmed

via the objective placement tests into a remedial course, where he may spend seventeen weeks on workbook drill exercises dealing with spelling and punctuation, two areas at which he is already competent. After seventeen weeks he still will not know the parts of speech or the connotation of certain words, and he still would not be able to pass the objective placement test, which obviously had programmed him into the wrong course in the first place.

Therefore, it can be seen that the sample tested, which was considered homogenous for research purposes,was anything but homogeneous, for it contained students who obviously would exhibit a wide range of competence in the writing skills to be tested. The fact is that there were no commonly accepted pre-requisites for the course. At one end of the spectrum certain schools had screened from their course all but the "elite," while at the other end of the spectrum were students who could never qualify for admittance into the universities let alone for admittance into the transfer classes. Yet there was one common denominator with all of the classes tested: their courses were transferable for college credit.

The pre-test was designed to allow the student to select a topic from a list of fifteen and to develop the topic into an essay within a forty-five minute period. The topics dealt mainly with general current issues but varied greatly so as to allow the student a choice of subjects that might appeal to him for an expository essay. The instructions specified that the student try

to take a persuasive stand on the subject or at least begin his essay with an effective topic sentence. The instructions also recommended a length for the essay: about 250 words, which would run about three pages, more or less, on the booklet provided for the test. All writing was to be double spaced, and pens were provided for the students.

The grading criteria were also listed on the booklet. These criteria were based upon four,equally weighted items: content, organization, mechanics, and sentence structure and diction. Under each of the items was a breakdown of what was involved. Content invovled primarily the significance of what the student wrote rather than how much he wrote and was based upon a certain amount of logical, factual evidence to support generalizations. However, a certain amount of substance was required. Organization included a brief introduction which had to contain an explicit thesis statement or topic sentence referring to the essay question, coherence between sentences and between paragraphs through the use of transitions or other devices, development of paragraphs containing specific supporting evidence, and a brief paragraph that unified the essay and served as a conclusion. Mechanics included spelling, correct punctuation, and basic usage. Finally, sentence structure involved not only correct grammar and usage but also a variety of sentence patterns with appropriate, effective diction.

The stanine grading method, however, was not explained in the booklet since the researcher felt that the students' time would be better served in writing rather than in attempting to comprehend statistical analysis.

The stanine(standard scale of nine) was used by the researcher to evaluate each equally weighted criterion listed above. One represented the lowest possible grade anyone could receive in any of the four criteria, 2 and 3 represented below average work; 4, 5, and 6 represented varying degrees of the norm(C-, C, and C+); and finally, 7, 8, and 9 were equivalent to the above average grades of B, B+ to A-, and A respectively. The grades were then averaged by adding them and dividing by four. The resultant composite stanine score was used as the final score for each paper.

The pre-test was administered to most of the classes during their first week of the course, or at the latest during the second week, so that the researcher would have an untreated sample. For most of the classes the test was unanticipated, and even those classes that anticipated it had no way of knowing what the essay question would be since the researcher himself administered the test to all classes, with the exception only of West Los Angeles College, where the participating instructor of that group administered the test on the same day she received the papers. As previously mentioned, the one school which failed to comply with these controlled conditions, a state college, was disqualified from the survey.

A fifty-minute period was required for the test, with five minutes being allocated for the explanation of instructions and the remaining forty-five minutes for the writing of the essay. The papers were collected at the end of the period by the researcher, coded, sealed for anonymity of identification, and

then mixed together with papers from all of the classes involved in the survey so as to remain anonymous to the reader, thereby eliminating any possibility of bias in his grading. Although this procedure guaranteed anonymity, it might be noted that there was one exception to this safeguard: the papers from Fullerton College, which were graded before the others were in order for the instructor to review them with her class the following week. However, this was the only exception, and it occurred only in the pre-test.

The pre-test sample involved 486 papers from sixteen groups of first-semester freshman composition transfer students among eleven community colleges and universities. The grading procedure was rigidly controlled to eliminate any possible variables. All of the papers were read and graded solely by the researcher without any assistance or consultation whatsoever. Each paper received at least three readings: one for content, one for organization, and one for mechanics and sentence structure. The reader utilized symbols in his grading and wrote brief explanatory comments on many of the papers when he felt such comments were necessary. This procedure, which took up several hours of the researcher's time daily, required about three weeks. After the papers had been graded and their identification seals removed, their scores were recorded, and then the papers, along with a set of correction keys, were returned to the participating instructors for review with the students, after which the papers were returned to the researcher for his permanent file. The researcher then consulted personally or by phone with each of the participating instructors

for feedback on his grading. With each instructor there appeared to be a very high correlation between what the instructor might have given the individual student for a grade on that particular paper and the actual grade assigned by the researcher to that paper. Generally, the students who received low grades on the pre-test also received low grades on their first few essays from their individual instructors. Conversally, those students who received high pre-test scores did very well in the course.

After compiling the pre-test results and writing a brief report on the pre-test survey, the researcher mailed the data and report to the participating instructors and their supervisors, all of whom were most cooperative throughout the survey, and all of whom further granted the researcher permission to conduct a post-test.

The post-test, similar in nature to the pre-test, except that there were only ten questions from which the student could choose to write his essay instead of fifteen, was administered to most of the classes in the survey during the week of December 11th, which was the fourteenth week of the semester for practically all schools except UCLA and CSULB, both of which began their courses somewhat later than did the colleges. The University of California at Los Angeles took the post-test just before the close of its quarter, on the ninth week, thereby receiving five weeks less of instruction than the colleges received. California State University at Long Beach received approximately two weeks less of instruction before taking its post-test than did the community colleges.

Because of his busy teaching schedule, particularly before the semester break, the researcher was unable to administer the post-test personally at all of the schools on the designated dates. However, he was most fortunate in receiving full cooperation from all of the participating instructors, several of whom administered the test themselves to their classes on the dates specified. Participating instructors administered the test at these schools: UCLA, USC, West Los Angeles, Compton(B), and Golden West(both groups). The researcher himself administered the test at the remaining schools. Although all of the participating instructors had advance knowledge of the testing date, and although they may have been able to prepare their students psychologically for the test, no one except the researcher knew in advance what the exact questions would be, for the researcher did not discuss the questions with anyone, and he delivered the tests to the individual instructors only one day in advance of the testing date or on the testing date itself.

The grading procedure was identical to that used in the pre-test. After all of the papers were collected, they were coded, sealed for identification under the supervision of a professional insurance adjuster, and then mixed together for anonymity. During the Christmas vacation they were read and graded solely by the researcher, using exactly the same criteria and scoring system as he had previously used. After the papers had all been graded, their seals were removed, they were regrouped

according to schools and groups within the schools, and their scores were recorded. The papers were then delivered to the participating instructors for class review and finally returned to the researcher for his permanent file.

The results were then computed and delivered, along with a brief report of the survey, to all of the participating instructors and their teaching supervisors.

VI. RESULTS

Pre-Test Composite Stanine Scores of All Students Originally Tested in the Kates Survey of Freshman Composition Writing Skills

SCHOOL & GRP.	NO. STUDENTS	MEAN GROUP SCORE	No. of students receiving stanine of 1	2	3	4	5	6	7	8	9
UCLA	22	6.82	0	0	2	1	0	4	7	5	3
USC	22	5.23	1	1	4	1	5	3	4	2	1
CSULB	24	5.21	0	2	3	5	1	6	5	2	0
FULLERTON	21	4.71	0	1	2	8	4	4	1	1	0
GOLDEN WEST(A)	53	4.57	1	4	13	7	9	13	5	1	0
EL CAMINO(C)	23	4.43	0	3	4	6	5	2	1	2	0
GOLDEN WEST(TOTAL)	81	4.41	1	7	21	15	11	19	6	1	0
EL CAMINO(B)	35	4.29	0	3	10	8	4	8	2	0	0
CYPRESS	58	4.26	2	7	12	11	13	6	6	1	0
EL CAMINO(TOTAL)	92	4.21	0	12	23	22	13	14	6	2	0
MASTER(GRAND TOTAL)	486	4.13	30	68	105	83	66	64	48	18	4
GOLDEN WEST(B)	28	4.11	0	3	8	8	2	6	1	0	0
WEST L.A.	31	4.03	5	3	5	6	5	1	4	2	0
COMPTON(A)	23	3.39	3	3	6	6	4	0	1	0	0
ORANGE COAST	30	3.33	5	9	6	2	2	2	3	1	0
L.A. SOUTHWEST(A)	30	3.30	4	10	6	3	1	3	2	1	0
COMPTON(TOTAL)	45	3.29	7	9	12	6	6	2	3	0	0
COMPTON(B)	22	3.18	4	6	6	0	2	2	2	0	0
L.A. SOUTHWEST (TOTAL)	60	3.15	9	17	15	6	6	3	3	1	0
L.A. SOUTHWEST(B)	30	3.00	5	7	9	3	5	0	1	0	0

Table 1

FINAL RESULTS: KATES SURVEY OF FRESHMAN WRITING SKILLS

SCHOOL ...	SMAPLE SIZE	MAX.	MIN.	RANGE	MEAN	VARIANCE	STANDARD DEVIATION	MEAN DEVIATION	MEDIAN	MODE	STANINE GAIN	z-RATIO	SIGNIFICANT AT
UCLA	pre-16	9	3	6	6.875	3.85	1.962	1.438	7	7			
	post	9	5	4	7.813	1.496	1.223	0.984	8	9	0.938	0.0971	10%
USC	pre-17	8	2	6	5.529	3.140	1.772	1.439	6	5 7			
	post-	9	5	4	7.706	1.596	1.263	1.052	8	9	2.176	0.0318	5%
El Camino Grp.C	pre-17	8	2	6	4.824	3.154	1.776	1.363	5	4			
	post-	9	4	5	7.412	2.632	1.622	1.329	8	9	2.588	0.032	5%
El Camino (B)	pre-22.	7	2	5	4.5	2.262	1.504	1.273	4	4			
	post-	9	4	5	7.136	2.409	1.552	1.318	7.5	8	2.636	0.0243	5%
El Camino (A)	pre-29	7	2	5	4.207	2.456	1.567	1.291	4	3,4			
	post-	9	3	6	6.655	3.234	1.798	1.532	7	8	2.448	0.018	5%
El Camino (total)	pre-68	8	2	6	4.456	2.550	1.597	1.333	4	4			
	post-	9	3	6	7.	2.836	1.684	1.382	7	8	2.544	6.383782392E-16 (0.001%)	
Golden West (B)	pre-8	7	2	5	4.625	2.839	1.685	1.375	4.5	4,6			
	post-	9	4	5	7	2.857	1.690	1.25	7.5	8	2.375	0.0546	10%
Golden West (A)	pre-18	7	2	5	5.444	2.261	1.504	1.185	6	6			
	post-	9	3	6	6.667	2.706	1.645	1.296	7	7	1.222	0.001	1%
Golden West (total)	pre-26	7	2	5	5.192	2.4815	1.575	1.317	6	6			
	post-	9	3	6	6.769	2.665	1.632	1.302	7	7,8	1.577	0.019	5%

Table 2

FINAL RESULTS: KATES SURVEY OF FRESHMAN WRITING SKILLS

SCHOOL	SAMPLE SIZE	MAX.	MIN	RANGE	MEAN	VARIANCE	STANDARD DEVIATION	MEAN DEVIATION	MEDIAN	MODE	STANINE GAIN	z-RATIO	SIGNIFICANT AT
CSULB	pre- 17	8	2	6	5.471	3.015	1.736	1.446	6	6			
	post-	9	4	5	6.529	1.765	1.328	1.087	7	7	1.059	0.0316	5%
Cypress	pre- 29	8	1	7	4.517	2.759	1.661	1.327	5	5			
	post-	9	3	6	6.276	2.707	1.645	1.258	6	6	1.759	0.0179	5%
Orange Coast	pre- 18	8	1	7	3.889	5.399	2.324	1.988	3	2			
	post-	9	2	7	5.778	4.889	2.211	1.889	5.5	8	1.889	0.0089	1%
West L.A.	pre- 18	8	1	7	4.5	4.029	2.007	1.611	4.5	3,5			
	post-	9	4	5	5.722	2.565	1.602	1.389	5.5	4	1.222	0.0297	5%
L.A. South- west (B)	pre- 17	8	1	7	3.765	3.941	1.985	1.606	3	3			
	post-	8	1	7	5.294	3.971	1.993	1.654	6	6	1.529	0.0063	1%
L.A. S.W. (A)	pre- 23	7	1	6	3.174	2.150	1.466	1.112	3	3			
	post-	8	2	6	5.174	2.514	1.586	1.327	5	4	2	0.0232	5%
L.A. S.W. (total)	pre- 40	8	1	7	3.425	2.917	1.708	1.353	3	3			
	post-	8	1	7	5.225	3.051	1.747	1.475	5.5	6	1.8	0.0130	5%

FINAL RESULTS: KATES SURVEY OF FRESHMAN WRITING SKILLS

SCHOOL	SAMPLE SIZE	MAX.	MIN.	RANGE	MEAN	VARIANCE	STANDARD DEVIATION	MEAN DEVIATION	MEDIAN	MODE	STANINE GAIN	z-RATIO	SIGNIFICANT AT
Compton (B)	pre- 14	7	1	6	3.643	5.324	2.307	2.020	3	1			
	post-	8	3	5	5.643	4.247	2.061	1.786	5.5	8	2.	0.0108	5%
Compton (A)	pre- 14	5	1	4	3.357	1.324	1.151	0.929	3.5	4			
	post-	7	2	5	4.714	2.527	1.590	1.286	4.5	4	1.357	0.0196	5%
Comp. (total)	pre- 28	7	1	6	3.5	3.222	1.795	1.464	3	3			
	post-	8	2	6	5.179	3.485	1.867	1.574	5	4	1.679	0.0174	5%
Fullerton	pre- 8	8	3	5	5	2.571	1.604	1.25	4.5	4			
	post-	8	4	4	5.5	3.429	1.852	1.625	4.5	4	0.5	0.5674	not
Master (Grand Total)	pre- 285	9	1	8	4.533	3.750	1.936	1.649	4	3			
	post-	9	1	8	6.337	3.450	1.857	1.580	7	8	1.804	4.163336342E-16	0.001%

FINAL RESULTS: INDIVIDUAL SCORES FOR KATES SURVEY OF FRESHMAN COMPOSITION WRITING SKILLS

SCHOOL	SAMPLE SIZE	MEAN SCORE	STANINE GAIN	z-RATIO	Below Aver. 1	2	3	Average 4	5	6	Above Average 7	8	9
UCLA	pre- 16	6.875			0	0	2	1	0	1	5	4	3
	post-	7.813	0.938	0.0971					1	1	4	4	6
USC	pre- 17	5.529			0	1	2	1	4	3	4	2	0
	post-	7.706	2.176	0.0318					1	2	4	4	6
El Camino Grp.(C)	pre- 17	4.824			0	2	1	5	4	2	1	2	0
	post-	7.412	2.588	0.032				1	2	1	4	3	6
El Camino (B)	pre- 22	4.5			0	2	4	6	3	5	2	0	0
	post-	7.136	2.636	0.0243				1	3	4	3	6	5
El Camino (A)	pre- 29	4.207			0	4	7	7	4	4	3	0	0
	post-	6.655	2.448	0.018			2	2	5	2	5	10	3
El Camino (total)	pre- 68	4.456			0	8	12	18	11	11	6	2	0
	post-	7.0	2.544	6.39E-16			2	4	10	7	12	19	14

TABLE 3

FINAL RESULTS: INDIVIDUAL SCORES FOR KATES SURVEY OF FRESHMAN COMPOSITION WRITING SKILLS

SCHOOL	SAMPLE SIZE	MEAN SCORE	STANINE GAIN	z-RATIO	Below Aver. 1	2	3	Average 4	5	6	Above Average 7	8	9
Golden West Grp. (B)	pre- 8	4.625			0	1	1	2	1	2	1	0	0
	post-	7.0	2.375	0.0546				1	1	0	2	3	1
Golden West (A)	pre- 18	5.444			0	1	2	1	2	8	4	0	0
	post-	6.667	1.222	0.001			1	1	2	3	5	4	2
Golden West (total)	pre- 26	5.192			0	2	3	3	3	10	5	0	0
	post-	6.769	1.577	0.019	0	0	1	2	3	3	7	7	3
CSULB	pre- 17	5.471			0	1	1	4	1	5	3	2	0
	post-	6.529	1.059	0.0316				1	3	4	5	3	1
Cypress	pre- 29	4.517			1	2	5	6	8	3	3	1	0
	post-	6.276	1.759	0.0179			2	1	5	11	3	3	4
Orange Coast	pre- 18	3.889			2	5	3	2	0	2	3	1	0
	post-	5.778	1.889	0.0089		1	2	3	3	2	1	4	2
West L.A.	pre- 18	4.5			1	1	5	2	5	0	2	2	0
	post-	5.722	1.222	0.0297				6	3	2	5	1	1

FINAL RESULTS: INDIVIDUAL SCORES FOR KATES SURVEY OF FRESHMAN WRITING SKILLS

SCHOOL	SAMPLE SIZE	MEAN SCORE	STANINE GAIN	z-RATIO	Below Aver. 1	2	3	Average 4	5	6	Above Average 7	8	9
L.A. Southwest (B)	pre- 17	3.765			1	4	5	2	1	2	1	1	0
	post-	5.294	1.529	.0.0063	1	0	3	2	1	5	3	2	0
L.A. Southwest (A)	pre- 23	3.174			2	6	8	2	4	0	1	0	0
	post-	5.174	2.0	0.0232	0	1	2	6	4	4	5	1	0
L.A. S.W. (total)	pre- 40	3.425			3	10	13	4	5	2	2	1	0
	post-	5.225	1.8	0.0130	1	1	5	8	5	9	8	3	0
Compton (B)	pre- 14	3.643			4	1	3	0	2	2	2	0	0
	post-	5.643	2.0	0.0108			3	2	2	2	0	5	0
Compton (A)	pre- 14	3.357			1	2	4	5	2	0	0	0	0
	post-	4.714	1.357	0.0196	0	1	2	4	3	1	3	0	0
Compton (total)	pre- 28	3.5			5	3	7	5	4	2	2	0	0
	post-	5.179	1.679	0.0174	0	1	5	6	5	3	3	5	0

FINAL RESULTS: INDIVIDUAL SCORES FOR KATES SURVEY OF FRESHMAN WRITING SKILLS

SCHOOL	SAMPLE SIZE	MEAN SCORE	STANINE GAIN	z-RATIO	Below Aver. 1	2	3	Average 4	5	6	Above Average 7	8	9
Fullerton	pre- 8	5.0			0	0	1	3	1	2	0	1	0
	post-	5.5	0.5	0.5674				4	1	0	1	2	0
Master (Grand Total)	pre- 285	4.533			12	33	54	49	42	41	35	18	3
	post-	6.337	1.804	4.1633E-16	1	3	17	35	40	44	53	55	37

Stanine(standard scale of nine) scores

NOTE: These scores include only those students who took both the pre-test and post-test. The resultant 2 tail z-test is more reputable than the 1 tail test would be (the inclusion of all 486 students in the pre-test). By using the 2 tail test, the researcher avoids the accusation that the low students were dropped and consequently there was no improvement. If the results are significant with a 2 tail test, they are always significant with a 1 tail test.

NOTE REGARDING SIGNIFICANCE: The smaller the number, the more significant are the results. For example, a z-ratio of 0.01 (significant at the 1% level of confidence) means that there is only 1% probability of the increase due to random chance. This is more significant than a z-ratio of 0.05, where there is a 5% chance of increase due to random chance, and much more significant than a z-ratio of 0.10 (10%), which is not considered to be significant at all--or barely significant--by many researchers. In short, results are considered most significant at 1% and least signficant at 10%. Above 10% they are not considered significant at all.

FINAL OVERALL RESULTS: COMPARISON OF COLLEGE AND UNIVERSITY ACHIEVEMENT IN KATES SURVEY

SCHOOL	SAMPLE SIZE	MAX.	MIN.	RANGE	MEAN	VARIANCE	STANDARD DEVIATION	MEAN DEVIATION	MEDIAN	MODE	STANINE GAIN	z-RATIO	SIGNIFICANT at
Universities (total)	pre- 50	9	2	7	5.94	3.609	1.90	1.557	6	7			
	post-	9	4	5	7.34	1.902	1.379	1.154	7	7, 9	1.4	0.0102	5%
Colleges (total)	pre- 235	8	1	7	4.234	3.282	1.811	1.60	4	3			
	post-	9	1	8	6.123	3.527	1.878	1.588	6	8	1.889	4.163336342E-16	(0.001%)
Master (grand total)	pre- 285	9	1	8	4.533	3.750	1.936	1.649	4	3			
	post-	9	1	8	6.337	3.450	1.857	1.580	7	8	1.804	4.163336342E-16	(0.001%)

TABLE 4

Kates-Survey Group Achievement Chart: Post-Test Stanine Gain

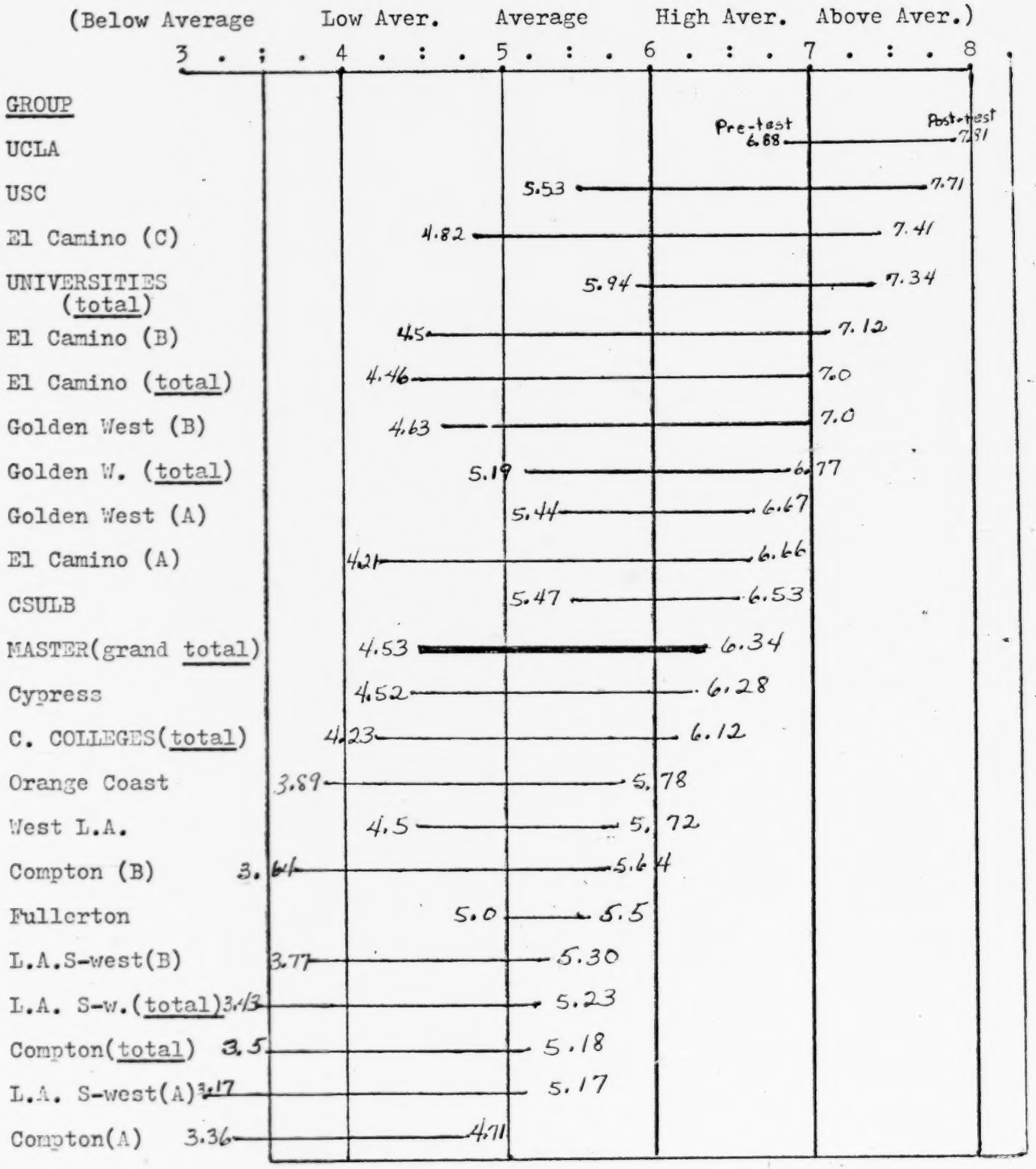

Table 5

Individual and Group Scores for Content of All Students Originally Tested(Pre-Test Gross), with Adjustments for 2-tail test (Pre-Net), and with Comparisions to Post-Test

SCHOOL TEST	SAMPLE SIZE	MEAN	GAIN	No. of students receiving stanine of 1	2	3	4	5	6	7	8	9
CSULB												
pre-gross	24	6.46		0	2	2	2	1	3	4	4	6
pre-net	17	6.53		0	1	2	2	0	2	2	3	5
post-	17	7.35	0.82				1	2	3	2	2	7
COMPTON (A)												
pre-gross	23	5.22		0	1	5	4	2	5	2	3	1
pre-net	14	5.14		0	1	2	3	2	3	1	1	1
post-	14	5.29	0.15	0	0	2	2	2	6	2	0	0
COMPTON(B)												
pre-gross	22	4.55		1	3	7	2	2	1	2	2	2
pre-net	14	4.86		1	2	3	1	2	0	2	1	2
post-	14	6.21	1.35	0	0	2	1	3	2	1	2	3
COMPTON (TOTAL)												
pre-gross	45	4.89		1	4	12	6	4	6	4	5	3
pre-net	28	5.00		1	3	5	4	4	3	3	2	3
post-	28	5.75	0.75	0	0	4	3	5	8	3	2	3
CYPRESS												
pre-gross	58	5.76		1	2	6	10	7	8	11	6	7
pre-net	29	6.07		1	0	3	4	3	4	6	3	5
post-	29	7.52	1.45				1	2	5	5	5	11
EL CAMINO (A)												
pre-gross	34	4.88		1	3	5	9	3	6	3	0	4
pre-net	29	5.10		1	2	3	8	3	5	3	0	4
post-	29	7.34	2.24	0	1	1	3	0	2	4	6	12

Table 6

SCHOOL TEST	SAMPLE SIZE	MEAN	GAIN	No. of students receiving stanine of 1	2	3	4	5	6	7	8	9
EL CAMINO(B)												
pre-gross	35	4.83		1	2	6	9	3	6	6	1	1
pre-net	22	5.14		1	1	1	6	2	5	5	1	0
post-	22	7.73	2.59			1	0	0	5	2	3	11
EL CAMINO(C)												
pre-gross	23	5.83		0	3	3	1	1	5	4	2	4
pre-net	17	6.47		0	1	2	0	1	4	3	2	4
post-	17	8.06	1.59			1	0	0	0	2	6	8
EL CAMINO(TOTAL)												
pre-gross	92	5.10		2	8	14	19	7	17	13	3	9
pre-net	68	5.46		2	4	6	14	6	14	11	3	8
post-	68	7.65	2.19	0	1	3	3	0	7	8	15	31
FULLERTON												
pre-gross	21	6.0		0	1	1	2	3	7	3	1	3
pre-net	08	5.63		0	1	0	2	1	2	0	0	2
post-	08	5.75	0.12	0	1	1	0	1	2	1	1	1
GOLDEN WEST(A)												
pre-gross	53	5.94		2	2	3	6	6	8	14	8	4
pre-net	18	7.17					2	1	1	6	4	4
post-	18	7.44	0.27	0	1	0	0	2	2	1	5	7
GOLDEN WEST(B)												
pre-gross	28	4.71				11	5	2	3	5	2	0
pre-net	08	4.88				3	2	0	0	2	1	0
post-	08	7.88	3.0						1	3	0	4
GOLDEN WEST(TOTAL)												
pre-gross	81	5.64		2	2	14	11	8	11	19	10	4
pre-net	26	6.58		0	0	3	4	1	1	8	5	4
post-	26	7.58	1.0	0	1	0	0	2	3	4	5	11

Table 6 (Continued)

SCHOOL	TEST	SAMPLE SIZE	MEAN	GAIN	No. of students receiving staning of 1	2	3	4	5	6	7	8	9
LASW (A)													
	pre-gross	30	4.43		1	4	9	6	2	0	4	1	3
	pre-net	23	4.78		1	2	7	4	1	0	4	1	3
	post-	23	5.65	0.87	0	1	3	4	3	2	5	4	1
LASW(B)													
	pre-gross	30	4.57		2	4	8	4	3	1	2	2	4
	pre-net	17	4.94		0	2	5	2	2	1	1	2	2
	post-	17	6.59	1.65			2	2	1	2	2	5	3
LASW(TOTAL)													
	pre-gross	60	4.50		3	8	17	10	5	1	6	3	7
	pre-net	40	4.85		1	4	12	6	3	1	5	3	5
	post-	40	6.05	1.20	0	1	5	6	4	4	7	9	4
ORANGE COAST													
	pre-gross	30	4.80		2	2	5	7	1	6	4	1	2
	pre-net	18	5.28		0	2	3	3	1	3	3	1	2
	post-	18	6.89	1.61			2	2	1	3	1	1	8
UCLA													
	pre-gross	22	7.78		0	1	2	0	0	0	3	2	14
	pre-net	16	7.63		0	1	2	0	0	0	1	1	11
	post-	16	8.57	0.94					1	0	1	1	13
USC													
	pre-gross	22	6.68		1	1	1	2	2	0	5	2	8
	pre-net	17	6.80		1	0	1	1	2	0	4	1	7
	post	17	8.65	1.76							1	4	12
WEST L.A.													
	pre-gross	31	4.90		1	3	7	5	2	6	2	1	4
	pre-net	18	5.50		0	2	2	3	1	6	0	0	4
	post-	18	7.28	1.78					3	2	4	5	4
MASTER (GRAND TOTAL)													
	pre-gross	486	5.42		13	34	81	74	40	65	74	38	67
	pre-net	285	5.75		6	18	39	43	22	36	43	22	56
	post-	285	7.18	1.43	0	4	15	16	21	37	37	50	105

Table 6 (Continued)

Individual and Group Scores for Organization of All Students Originally Tested(Pre-Test Gross), with Adjustments for 2-tail test(Pre-Net), and with Comparisons to Post-Test

SCHOOL	TEST	SAMPLE SIZE	MEAN	GAIN	No. of students receiving stanine of 1	2	3	4	5	6	7	8	9
CSULB													
	pre-gross	24	5.17		3	3	3	0	0	5	5	4	1
	pre-net	17	5.35		2	2	2	0	0	3	4	3	1
	post-	17	6.65	1.30	0	1	0	0	4	1	6	2	3
COMPTON (A)													
	pre-gross	23	3.83		1	6	6	3	2	2	1	2	0
	pre-net	14	3.57		1	2	5	3	1	1	1	0	0
	post-	14	4.86	1.29	0	1	2	2	4	3	2	0	0
COMPTON (B)													
	pre-gross	22	3.86		4	3	5	1	3	3	2	0	1
	pre-net	14	4.00		4	2	1	0	2	2	2	0	1
	post-	14	5.79	1.79	0	0	1	4	3	1	1	2	2
COMPTON (TOTAL)													
	pre-gross	45	3.84		5	9	11	4	5	5	3	2	1
	pre-net	28	3.78		5	4	6	3	3	3	3	0	1
	post-	28	5.32	1.54	0	1	3	6	7	4	3	2	2
CYPRESS													
	pre-gross	58	4.64		5	9	11	4	4	5	14	5	1
	pre-net	29	5.17		3	2	4	1	3	4	9	2	1
	post-	29	6.55	1.38			2	5	3	5	3	1	10
EL CAMINO (A)													
	pre-gross	34	4.29		2	4	7	9	3	2	5	1	1
	pre-net	29	4.48		2	2	6	8	2	2	5	1	1
	post-	29	6.55	2.07	0	1	1	4	3	5	4	3	8

Table 7

SCHOOL	TEST	SAMPLE SIZE	MEAN	GAIN	No. of students receiving stanine of 1	2	3	4	5	6	7	8	9
EL CAMINO (B)													
	pre-gross	35	4.31		1	6	9	5	2	3	9	0	0
	pre-net	22	4.73		1	3	4	2	2	3	7	0	0
	post-	22	7.27	2.54	0	1	0	2	3	0	3	3	10
EL CAMINO (C)													
	pre-gross	23	3.91		1	4	4	4	3	3	2	1	1
	pre-net	17	4.65		1	2	3	3	2	2	2	1	1
	post-	17	7.47	2.74	0	0	0	1	2	1	4	2	7
EL CAMINO(TOTAL)													
	pre-gross	92	4.32		4	14	20	18	8	8	16	2	2
	pre-net	68	4.60		4	7	13	13	6	7	14	2	2
	post-	68	7.01	2.41	0	2	1	7	8	6	11	8	25
FULLERTON													
	pre-gross	21	4.81		0	5	2	2	2	5	3	2	0
	pre-net	08	4.50		0	3	1	0	1	1	0	2	0
	post-	08	4.63	0.13	1	2	0	2	0	0	1	1	1
GOLDEN WEST(A)													
	pre-gross	53	5.08		4	4	7	5	8	11	5	6	3
	pre-net	18	6.61		0	0	1	2	2	3	3	4	3
	post-	18	6.83	0.22	1	0	1	2	0	1	4	4	5
GOLDEN WEST(B)													
	pre-gross	28	4.04		0	6	8	7	1	1	3	1	1
	pre-net	08	4.75		0	2	2	1	0	0	1	1	1
	post-	08	7.12	2.37					2	1	1	2	2
GOLDEN WEST(TOTAL)													
	pre-gross	81	4.72		4	10	15	12	9	12	8	7	4
	pre-net	26	6.04		0	2	3	3	2	3	4	5	4
	post-	26	7.15	1.11	1	0	1	2	2	2	5	6	7

Table 7 (Continued)

SCHOOL	TEST	SAMPLE SIZE	MEAN	GAIN	No. of students receiving stanine of 1	2	3	4	5	6	7	8	9
LASW (A)													
	pre-gross	30	3.20		6	7	6	5	0	4	2		
	pre-net	23	3.30		4	5	6	3	0	3	2		
	post-	23	5.43	2.13	0	1	5	1	5	3	5	1	2
LASW (B)													
	pre-gross	30	3.57		5	8	6	3	1	2	3	0	2
	pre-net	17	3.59		3	4	4	1	1	1	2	0	1
	post-	17	5.94	2.35	0	3	0	3	0	1	5	3	2
LASW (TOTAL)													
	pre-gross	60	3.38		11	15	12	8	1	6	5	0	2
	pre-net	40	3.43		7	9	10	4	1	4	4	0	1
	post-	40	5.63	2.22	0	4	5	4	5	4	10	4	4
ORANGE COAST													
	pre-gross	30	3.20		8	6	8	2	1	0	3	0	2
	pre-net	18	3.94		4	2	5	1	1	0	3	0	2
	post-	18	6.44	2.50			4	2	1	1	1	3	6
UCLA													
	pre-gross	22	7.23		1	2	0	0	0	3	1	6	9
	pre-net	16	7.19		1	2	0	0	0	1	0	4	8
	post-	16	8.19	1.0			1	0	0	1	0	4	10
USC													
	pre-gross	22	5.50		3	2	1	2	3	1	3	2	5
	pre-net	17	5.65		2	2	1	0	3	1	2	2	4
	post-	17	8.00	2.35				1	0	0	3	6	7
WEST L.A.													
	pre-gross	31	4.13		5	8	3	2	2	5	1	2	3
	pre-net	18	4.67		1	5	2	1	2	3	0	1	3
	post-	18	6.11	1.44			3	0	4	2	5	2	2
MASTER (GRAND TOTAL)													
	pre-gross	486	4.43		49	83	86	54	35	55	62	32	30
	pre-net	285	4.76		29	40	47	26	22	30	43	21	27
	post-	285	6.54	1.78	02	10	20	29	34	26	48	39	77

Table 7 (Continued)

Individual and Group Scores for Mechanics of All Students Originally Tested(Pre-Test Gross), with Adjustments for 2-tail test (Pre-Net), and with Comparisons to Post-Test

SCHOOL	TEST	SAMPLE SIZE	MEAN	GAIN	No. of students receiving stanine of 1	2	3	4	5	6	7	8	9
CSULB													
	pre-gross	24	5.17		0	2	3	6	1	5	4	3	0
	pre-net	17	5.47		0	1	2	4	0	4	3	3	0
	post-	17	6.41	0.94				4	0	4	5	2	2
COMPTON (A)													
	pre-gross	23	2.57		6	5	8	3	0	0	1	0	0
	pre-net	14	2.36		3	4	6	1	0	0	0	0	0
	post-	14	4.64	2.28	2	0	3	3	1	1	2	1	1
COMPTON (B)													
	pre-gross	22	2.91		9	5	2	1	1	0	3	0	1
	pre-net	14	3.50		6	2	0	1	1	0	3	0	1
	post-	14	5.71	2.21	0	2	2	0	1	3	2	3	1
COMPTON (TOTAL)													
	pre-gross	45	2.73		15	10	10	4	1	0	4	0	1
	pre-net	28	2.93		09	6	6	2	1	0	3	0	1
	post-	28	5.18	2.25	02	2	5	3	2	4	4	4	2
CYPRESS													
	pre-gross	58	3.76		10	7	14	10	8	3	4	2	0
	pre-net	29	3.45		06	3	7	6	3	2	0	2	0
	post-	29	5.79	2.34	01	0	0	6	9	3	2	6	2
EL CAMINO (A)													
	pre-gross	34	4.24		2	5	8	4	6	2	6	1	0
	pre-net	29	4.45		2	4	5	3	6	2	6	1	0
	post-	29	6.79	2.34	0	1	1	2	2	4	7	7	5

Table 8

SCHOOL	TEST	SAMPLE SIZE	MEAN	GAIN	No. of students receiving stanine of 1	2	3	4	5	6	7	8	9
EL CAMINO (B)													
	pre-gross	35	4.34		1	5	7	4	8	6	4	0	0
	pre-net	22	4.55		1	1	5	3	4	6	2	0	0
	post-	22	7.18	2.63				1	3	4	2	7	5
EL CAMINO (C)													
	pre-gross	23	3.96		1	5	8	2	0	3	2	2	0
	pre-net	17	4.35		1	2	7	0	0	3	2	2	0
	post-	17	7.35	3.0	0	1	0	0	0	3	3	6	4
EL CAMINO (TOTAL)													
	pre-gross	92	4.21		4	15	23	10	14	11	12	3	0
	pre-net	68	4.46		4	7	17	6	10	11	10	3	0
	post-	68	7.06	2.60	0	2	1	3	5	11	12	20	14
FULLERTON													
	pre-gross	21	4.71		1	5	2	1	3	3	3	3	0
	pre-net	08	5.25		0	1	2	0	1	1	1	2	0
	post-	08	6.00	0.75			1	2	0	1	1	3	0
GOLDEN WEST (A)													
	pre-gross	53	4.15		6	6	10	10	2	13	4	2	0
	pre-net	18	4.50		1	2	4	3	0	5	2	1	0
	post-	18	6.72	2.22				3	2	1	4	7	1
GOLDEN WEST (B)													
	pre-gross	28	4.36		1	5	5	4	1	9	3	0	0
	pre-net	08	4.75		0	2	0	2	0	2	2	0	0
	post-	08	6.25	1.50		1	1	0	0	0	3	3	0
GOLDEN WEST (TOTAL)													
	pre-gross	81	4.22		7	11	15	14	3	22	7	2	0
	pre-net	26	4.58		1	4	4	5	0	7	4	1	0
	post-	26	6.58	2.0	0	1	1	3	2	1	7	10	1

Table 8 (Continued)

SCHOOL	TEST	SAMPLE SIZE	MEAN	GAIN	No. of students receiving stanine of 1	2	3	4	5	6	7	8	9
LASW (A)													
	pre-gross	30	2.47		8	9	9	2	0	1	1	0	0
	pre-net	23	2.57		4	8	8	2	0	0	1	0	0
	post-	23	5.43	2.86	1	0	3	3	4	3	7	2	0
LASW (B)													
	pre-gross	30	2.87		12	5	5	1	1	2	4	0	0
	pre-net	17	3.35		04	3	5	1	0	0	4	0	0
	post-	17	5.00	1.65	02	1	2	1	3	3	2	3	0
LASW (TOTAL)													
	pre-gross	60	2.66		20	14	14	3	1	3	5	0	0
	pre-net	40	2.90		08	11	13	3	0	0	5	0	0
	post-	40	5.25	2.35	03	1	5	4	7	6	9	9	0
ORANGE COAST													
	pre-gross	30	2.97		10	8	2	3	2	1	3	1	0
	pre-net	18	3.67		04	4	2	2	1	1	3	1	0
	post-	18	5.17	1.50	0	5	2	0	2	1	3	5	0
UCLA													
	pre-gross	22	6.09				2	3	2	4	7	3	1
	pre-net	16	6.13				1	3	1	4	3	3	1
	post-	16	7.63	1.50						3	4	5	4
USC													
	pre-gross	22	4.82		2	1	4	3	5	2	1	2	2
	pre-net	17	5.29		0	0	3	3	5	2	1	2	1
	post-	17	7.24	1.95				1	2	3	2	4	5
WEST L.A.													
	pre-gross	31	4.06		6	3	5	4	3	4	4	2	0
	pre-net	18	4.33		2	1	4	3	3	1	3	1	0
	post-	18	5.28	0.95	0	2	2	3	1	4	4	2	0
MASTER (GRAND TOTAL)													
	pre-gross	486	3.90		75	76	94	61	43	58	54	21	4
	pre-net	285	4.16		34	38	61	37	25	33	36	18	3
	post-	285	6.19	2.03	06	13	17	29	30	41	53	66	30

Table 8 (Continued)

Individual and Group Scores for Sentence Structure and Diction of All Students Originally Tested (Pre-Test Gross), with Adjustments for 2-tail test (Pre-Net), and with Comparisons to Post-Test

				No. of students receiving stanine of								
SCHOOL TEST	SAMPLE SIZE	MEAN	GAIN	1	2	3	4	5	6	7	8	9
CSULB												
pre-gross	24	5.21		1	3	1	3	3	5	7	0	1
pre-net	17	5.53		0	1	1	2	3	4	6	0	0
post-	17	6.88	1.35				1	1	6	2	5	2
COMPTON (A)												
pre-gross	23	3.26		6	1	7	3	3	2	1	0	0
pre-net	14	3.36		3	1	4	3	1	1	1	0	0
post-	14	5.00	1.64	1	2	1	2	2	2	2	0	2
COMPTON (B)												
pre-gross	22	3.14		8	3	5	0	1	2	1	2	0
pre-net	14	3.79		5	1	2	0	1	2	1	2	0
post-	14	5.86	2.07	0	1	2	1	0	3	4	3	0
COMPTON (TOTAL)												
pre-gross	45	3.20		14	4	12	3	4	4	2	2	0
pre-net	28	3.57		8	2	6	3	2	3	2	2	0
post-	28	5.43	1.86	1	3	3	3	2	5	6	3	2
CYPRESS												
pre-gross	58	4.28		3	6	8	20	6	9	3	3	0
pre-net	29	4.31		2	0	6	11	3	4	2	1	0
post-	29	6.14	1.83	0	1	3	1	3	8	7	3	3
EL CAMINO (A)												
pre-gross	34	4.18		1	5	10	6	3	2	6	1	0
pre-net	29	4.48		1	2	8	6	3	2	6	1	0
post-	29	6.90	2.42				5	1	5	2	13	3

Table 9

SCHOOL TEST	SAMPLE SIZE	MEAN	GAIN	No. of students receiving stanine of 1	2	3	4	5	6	7	8	9
EL CAMINO (B)												
pre-gross	35	4.89		1	3	7	3	5	7	8	1	0
pre-net	22	4.73		1	1	6	2	2	5	5	0	0
post-	22	7.27	2.54			1	2	0	1	5	9	4
EL CAMINO (C)												
pre-gross	23	4.65		0	4	4	4	3	4	1	2	1
pre-net	17	4.94		0	3	3	1	3	3	1	2	1
post-	17	7.47	2.53	0	1	0	0	1	2	2	5	6
EL CAMINO (TOTAL)												
pre-gross	92	4.51		2	12	21	13	11	13	15	4	1
pre-net	68	4.68		2	6	17	9	8	10	12	3	1
post-	68	7.16	2.48	0	1	1	7	2	8	9	27	13
FULLERTON												
pre-gross	21	4.62		0	4	4	3	1	4	4	1	0
pre-net	8	4.75		0	1	2	1	0	2	2	0	0
post-	8	6.13	1.38	0	0	2	0	1	0	3	1	1
GOLDEN WEST (A)												
pre-gross	53	4.47		6	3	10	7	10	6	8	2	1
pre-net	18	5.00		1	1	2	2	4	4	3	1	0
post-	18	7.17	2.17			1	1	1	2	2	8	3
GOLDEN WEST (B)												
pre-gross	28	4.61		1	3	5	4	5	4	6	0	0
pre-net	8	5.50		0	1	0	1	2	0	4	0	0
post-	8	7.00	1.50			1	0	1	0	2	2	2
GOLDEN WEST (TOTAL)												
pre-gross	81	4.51		7	6	15	11	15	10	14	2	1
pre-net	26	5.15		1	2	2	3	6	4	7	1	0
post-	26	7.12	1.97			2	1	2	2	4	10	5

Table 9 (Continued)

SCHOOL	TEST	SAMPLE SIZE	MEAN	GAIN	No. of students receiving stanine of 1	2	3	4	5	6	7	8	9
LASW (A)													
	pre-gross	30	3.20		7	7	2	6	6	0	1	1	0
	pre-net	23	3.26		3	7	2	6	4	0	0	1	0
	post-	23	5.35	2.09	1	0	5	1	4	4	5	3	0
LASW (B)													
	pre-gross	30	3.50		10	4	5	2	0	3	2	4	0
	pre-net	17	4.18		3	2	4	2	0	2	0	4	0
	post-	17	5.18	1.00	1	0	4	2	1	3	4	2	0
LASW (TOTAL)													
	pre-gross	60	3.35		17	11	7	8	6	3	3	5	0
	pre-net	40	3.65		6	9	6	8	1	2	0	5	0
	post-	40	5.28	1.63	2	0	9	3	5	7	9	5	0
ORANGE COAST													
	pre-gross	30	3.63		7	3	6	3	5	3	1	2	0
	pre-net	18	4.28		2	2	3	3	3	2	1	2	0
	post-	18	5.72	1.44	0	3	1	2	1	2	5	2	2
UCLA													
	pre-gross	22	7.18					1	1	5	4	8	3
	pre-net	16	7.31						1	4	3	5	3
	post-	16	7.50	0.19						3	6	3	4
USC													
	pre-gross	22	4.91		3	1	2	2	4	4	4	1	1
	pre-net	17	5.24		1	0	2	2	4	3	4	1	0
	post-	17	7.24	2.00		1	0	1	0	3	3	3	6
WEST L.A.													
	pre-gross	31	4.48		5	0	4	7	5	3	5	2	0
	pre-net	18	4.83		1	0	2	6	4	1	2	2	0
	post-	18	5.56	0.73	0	3	2	2	0	3	3	4	1
MASTER (GRAND TOTAL)													
	pre-gross	486	4.35		59	50	80	74	61	63	62	30	7
	pre-net	285	5.04		23	23	47	48	38	39	41	22	4
	post-	285	6.40	1.36	03	12	23	21	17	47	57	66	39

Table 9 (Continued)

VII. DISCUSSION OF RESULTS

Table 1 lists the composite scores of all of the students originally tested in the survey--that is, the pre-test gross. The remaining tables through table 5 inclusive are computed on a 2-tail basis; that is, they include the composite scores of only those students who took both the pre-and post-tests. Tables 6 through 9 inclusive list the individual and group scores of the pre-test gross, the pre-test net, and the post-test for each item tested: content, organization, mechanics, and sentence structure and diction. The results, therefore, include not only a comprehensive picture of the original pre-test(gross), but also a comprehensive picture of the 2-tail test, as well as an analysis of individual composite stanine scores and individual scores for each item tested. Each table listed in the results will be discussed individually.

Table 1

Table 1 lists in order of highest group achievement the composite stanine scores of all students originally tested in the pre-test: the pre-test gross. The schools which had more than one group participating are listed by the individual groups(A, B, C) and by the school as a whole(total). The results indicate that UCLA scored significantly above the norm(master or grand total of all groups tested): more than two stanines, which is greater than one standard deviation. USC and CSULB each scored in the high average range, which is considerably but not necessarily significantly above

the norm or master. It might be noted that these two universities scored more than 1.5 stanines below UCLA, a score indicating a considerable and perhaps significant difference, but only 0.50 stanines above the next highest ranking school. (One-half of a stanine is neither a considerable nor a significant difference.) In short, the mean group scores of both USC and CSULB appear to be closer to the group scores of the top ranking community colleges than they do to the group score of the top ranking university.

Five groups, headed by Fullerton, scored in the low average range of 4.2-4.7, which was slightly above the norm(master) in this test; and two groups, Golden West(B) and West L.A., scored very, very slightly below the norm. Three colleges--Orange Coast, Compton, and L.A. Southwest--scored in the below average range of 3.39-3.0. This range was approximately one stanine below the norm: a considerable but not necessarily a significant difference. However, the difference between this below average range and the high average range achieved by USC and CSULB is significant. In short, the pre-test survey indicates that there is a wide range of scores evident between the lower achieving groups and the higher achieving groups, and a very wide range evident between the lowest group and the highest.

Upon examination of individual scores, one notes that of the 486 students tested, 203(almost 42%) scored in the below average range of 3 or less. Of these students, 30 or almost 6% scored 1, which is not only the lowest possible score one may receive but is the mandatory score one must receive for even attempting the test. This score indicates writing illiteracy. At the other end of the

spectrum, one notes that 70 students(14%) scored in the above average range of 7 or higher; and of these, only 4(less than 1%) scored 9, a virtual perfect score which reflects complete mastery of all the items tested in the area of freshman composition writing skills. One might also note that the students who reflected such complete mastery at the beginning of their course were enrolled in universites: 3 at UCLA, and 1 at USC. The remaining 213 students(44%) scored in the average range of 4, 5, and 6.

In summary then, the pre-test survey reflects an incoming freshman population that is skewed considerably to the left or below average range on the stanine. Almost one-half of the students are writing below average, almost one-half are writing at an average level, and only one student in seven is writing above average. Less than one student per hundred has complete mastery of the writing skills tested, while one student in 17 is virtually illiterate altogether in writing.

Tables 2-5

Tables 2, 3, 4, and 5 are computed on the basis of the 2-tail test; that is, they include the scores of only those students who took both the pre-test and the post-test. For numerous reasons, including drops, 202 students were absent for the post-test. If group gains were to be computed on a 1-tail test, they would indicate significant results which would almost certainly be suspected by many researchers, who might voice the accusation that the low achieveing students were purposely dropped in order to achieve the gain, and, therefore, the gain was not actually valid. To avoid such an accusation, and to utilize the most reputable test, this researcher used the 2-tail test. All computations on tables 2, 3,

4, and 5, therefore, are based on the 2-tail test.

Table 2

Table 2 lists the final results of the 2-tail test. The groups are listed in order of highest post-test mean scores achieved by the school as a whole(total). Also included in the table are the sample size, the maximum score, minimum score, range, mean, variance, standard deviation, mean deviation, median, mode, stanine gain, z-ratio, and significance or confidence level of the results.

Table 2 indicates that UCLA again scored the highest, but the range evident between UCLA and other groups is considerably less than it was on the original pre-test, just discussed under table 1, and considerably less also on the basis of the 2-tail test. Whereas UCLA was in a class by itself in the pre-test, such is not the case in the post test; five other groups are now virtually in the same category with UCLA: 7, that is, above average. These groups are USC, El Camino(C), El Camino(B), El Camino(total), and Golden West(B). Furthermore, the differences evident between ULCA and these groups are only fractional at best, especially so with USC and El Camino(C), both of which have demonstrated a writing competence which is really second to none in this survey.

Five groups scored in the high average range: 6 or above. These groups include El Camino(A), Golden West(A), Golden West(total), CSULB, and Cypress. The remaining five groups scored 5 or above, which is the average range on the stanine. In short, unlike their achievement on the pre-test in which seven groups scored below average and only one group scored above average in their writing, all of the groups on

Table 6 (Continued)

the post-test achieved at least an average stanine score(4 or above), thereby indicating that they were writing at an acceptable level for entering freshmen, on this scale.

On the other hand, however, despite the average gain for all students tested, which was 1.804 stanines, and despite the average score for all of the 285 students tested, which was 6.337, the average student tested was still writing at a level of 1.476 stanines below his UCLA counterpart at the time of the post-test. Implications arising from this comparison will be discussed in the "Conclusion."

In summation, then, the post-test indicates that although all of the groups tested achieved some gain and wrote at an acceptable college freshman level, and although several groups achieved a very substantial gain, thereby placing them in virtually the same category with the top group, there is still a wide range evident between the top group and the lowest group, a range of 3.10 stanines as compared with 3.52 stanines on the pre-test. This range, which is to be expected in view of the very high level of achievement originally displayed by the top group, indicates that despite the considerable increase which occurred with almost all of the classes between the pre-and post-tests, there was simply such a wide range between the top group and the lowest group at the time of the pre-test, that it would have been virtually impossible for the lowest group to catch up within a short period of time.

Groups showing the greatest stanine gains are graphically depicted in table 5 and examined in the discussion of that table.

The z-ratio indicates that these gains, the difference in the means between the pre-and post-test scores, are generally significant; that is, they are not due to random chance. The smaller the number of the z-ratio, the more significant are the results. For example, a z-ratio of 0.01(significant at the 1% level of confidence) means that there is only a 1% probability of the increase being attributable to random chance. This is more significant that a z-ratio of 0.05, where there is a 5% chance of increase attributable to random chance, and much more significant than a z-ratio of 0.10(10%), which is not considered to be significant--or at most barely significant--by many researchers. In short, results are considered most significant at 1% and least significant at 10%. Above 10% they are not considered significant at all.

One further point might be made to clarify the z-ratio. Infinitesimally significant results in this table are expressed by z-ratios of 6.383782392E⁻16 or 4.163336342E⁻16, where the decimal point must be moved 16 places to the left in order to compare it to the other z-ratios listed. These numbers repute any challenge whatsover that the increase was due to random chance; instead, they indicate by an infinitesimally high probability that the increase was due to treatment of the group.

A special note on the significance of the results and their reflection on the instruction must be made at this point. The researcher must emphasize that even though some classes may not have achieved a significant gain, this should in no way reflect upon the competence of the instructor involved, upon the quality of instruction at the school, nor upon the population profile of

the school itself. Significant results may be affected by any of these three factors or a combination of them: actual gain, sample size, and standard deviation. With each factor, the smaller the number, the less chance there is for significant results. One group in particular, Fullerton, did not achieve a significant gain, primarily, this researcher believes, because of the very small sample size, which in turn was the direct result of a very large number of student absences during the post-test, a factor over which neither the instructor nor the researcher had any control. Furthermore, since several of these absent students had perfcrmed in the high average and above average ranges during the original pre-test(gross), which had included 486 students, it would be logical to assume that they would have done quite well on the post-test, thereby contributing to a considerable and perhaps significant gain for the group. However, since they were not present, such a gain did not occur. In short, the sample size was too small to reflect a reliable indication of the group's achievement, let alone an indication of the school's achievement.

The researcher would like to emphasize further that his tests were designed exclusively to measure basic writing skills utilized in a thesis and support type of essay, without any consideration to other skills or subject matter often taught in freshman composition courses, skills such as reading comprehension, analysis of literature, and library research. Several groups, including Fullerton, Orange Coast, L.A. Southwest, Cypress, and Golden West, devoted as much as six weeks to the formal research paper, while other groups such as USC and El Camino concentrated most heavily on expository essay writing. These factors almost certainly affected the results.

The groups showing the greatest significance in their results are as follows: less than 1% level of confidence(infinitesimally significant)--El Camino(total) and Master(grand total); at the 1% level of confidence(99% probability)--Orange Coast and L.A. Southwest(B); at the 5% level of confidence(at least 95% probability)--Compton(all groups), CSULB, Cypress, El Camino(A, B, and C), Golden West(total), L.A. Southwest(A and total), USC, and West L.A.; at the 10% level of confidence(90% probability)--Golden West(A), Orange Coast, and L.A. Southwest(B); and above the 10% level of confidence (not significant)--Fullerton.

Table 3

Table 3 lists the individual scores of all of the students, as well as the sample size, mean group score, stanine gain, and z-ratio. The groups are listed, as they are in table 2, according to highest post-test mean scores achieved by the school as a whole.

Although a detailed discussion of the individual scores will not be presented, one might note certain group improvements from the pre-test to the post-test. For example, none of the top groups in the post-test had any below average scores, yet they had 55 above average scores. Even the five lowest individual groups listed above the Master or norm had only 15 below average scores, a sharp contrast from the pre-test, when they exhibited 42 below average scores. These same five groups--Fullerton, Compton(A) and (B), and L.A. Southwest(A) and (B)--had a combined total of 21 above average scores as compared with only 6 on the pre-test. This same type of comparison might be made for all groups and all schools, but a glance at the Master(grand total) should be sufficient to draw one or two pertinent conclusions.

First, there was a definite increase in the achievement of the 285 students as a whole who were tested in this survey. As a group these students gained 1.804 stanines at an infinitesimally high level of probability. Second, and equally noticeable, was the large number of above average scores(145) compared with the small number of below average scores(21), a condition which was virtually the opposite to that evident on the pre-test, in which there were 99 below average scores compared with 56 above average. Therefore, a significant amount of learning did occur among the 285 students tested.

Table 4

Table 4 draws a comparison among three groups: the universities as a whole(total), the community colleges as a whole, and the Master or grand total of all students tested. One notes that the universities, which exhibited a mean score of 7.34 stanines on the post-test, achieved a stanine gain of 1.4 at the 5% level of confidence. By comparison, the community colleges, which scored 1.22 stanines below the universities on the post-test, achieved both a greater gain than did the universities(0.489 stanines greater) and a greater confidence level in their results. Therefore, one might conclude that although the universities achieved higher scores in both the pre-and post-tests than did the community colleges, more learning actually occurred at the colleges than at the universities.

As for comparisions between the colleges and the Master or norm, there appears to be very little difference in either the

mean scores, the stanine gains, or the z-ratio and significance. One reason, obviously, is that the survey included an overwhelming number of college students: 235, which is almost 83%.

Table 5

The chart in table 5 depicts in order of highest post-test score the stanine gain of each group, by means of a horizontal line, with the pre-test score on the left and the post-test score on the right. Obviously, the longer the line, the greater is the gain. Groups showing the greatest stanine gains are as follows: El Camino(B) 2.636, El Camino(C) 2.588, El Camino(total) 2.544, El Camino(A) 2.488, Golden West(B) 2.375, USC 2.176, Compton(B) and L.A. Southwest(A) 2.0, Orange Coast 1.889, Master or norm(grand total) 1.804, L.A. Southwest(total) 1.8, Cypress 1.759, Compton (total) 1.679, Golden West(total) 1.577, L.A. Southwest(B) 1.529, Compton(A) 1.357, West L.A. and Golden West(A) 1.222, CSULB 1.059, UCLA 0.99, and Fullerton 0.5.

One might note that although UCLA again heads the list by virtue of its high post-test score, its gain is not the largest but rather the second smallest; conversally, although Compton(A) is at the bottom of the chart, its gain is considerably greater than that of UCLA. The average gain of all students tested is indicated by the Master or norm(grand total), located in the center of the chart. Thus, the Master is also the median, and, thereby, serves to depict how far any group is from the norm in terms of both pre-and post-test achievement.

The chart, therefore, illustrates the most important findings of the survey, particularly since it measures the actual stanine

gain of each group within a particular time period. It should be noted that the Master or average student and/or group achieved a gain of 1.804 staninos in a fourteen-week period. Some groups naturally achieved a considerably greater gain than did the average group. Both El Camino(B) and (C), for example, achieved a gain of almost 1 stanine greater than that of the norm. On the other hand, UCLA, with only nine weeks of instruction, and Fullerton, with a sample too small to be considered reliable, both fell considerably short of the gain achieved by the average group.

Regarding the ranking of the lower groups, it should be noted that their gains were approximately average, but their scores on the pre-test were so low that it would have been highly unlikely for them to catch up with the average group in such a brief period of time. Had they shown superior gains, like those of El Camino, their rankings might have improved. However, their deficiencies in basic writing skills were so acute when they took the pre-test, that any such gain would have been improbable. The basic writing skills which were tested are analyzed item by item in tables 6 through 9 inclusive.

Table 6, 7, 8, and 9

These tables list in alphabetical order by group both the group and individual scores for the pre-test gross, the pre-test net, and post-test of the following items tested: content, organization, mechanics, and sentence structure and diction. The tables also list the sample size, mean group score, and gain. A detailed discussion of each table will not be presented, but the researcher would like to make a few observations.

In the pre-test each of the universities, but particularly UCLA, appears considerably stronger than does the average group (Master) in practically all of the items tested. In the area of content, the average student(Master) performs in the average stanine range, whereas the university student appears to have more to say and what he says is also somewhat more significant and more logically supported. However, at the end of the fourteen-week period, the average student has more or less closed the gap which previously existed between him and the university student in this area.

Organization, however, presents a greater problem for the average student on his pre-test, for although he achieves a stanine gain of 1.78 in this area, his essay is still not as well organized as is the student's essay from UCLA or USC. Both of these universities appear to be in a class by themselves in this particular area.

Tables 8 and 9,which deal with mechanics and sentence structure respectively, point out the extreme pre-test deficiences in spelling, punctuation, basic usage, and the ability to use appropriate diction in order to compose a grammatically correct sentence. These glaring deficiences are most evident among students from Compton, L.A. Southwest, and Orange Coast, but they are also quite evident to a lesser extent among all of the groups tested, including the universities. In the area of mechanics, which deals mainly with spelling and punctuation, students appear to have the most difficulty of all, not only in the pre-test, but in the post-test as well. In the area of sentence structure and diction, they have slightly less difficulty, particularly on the pre-test; that is, their scores on the pre-test are considerably higher for sentence structure than they are for mechanics.

One might note the pre-and post-test scores of the average student(Master) as well as his gain in each of the items tested. In the area of content he achieves a stanine gain of 1.43, his score going from 5.75 on the pre-test net to 7.18 on the post-test. In organization his score rises from 4.76 on the pre-test to 6.54 on the post-test, for a gain of 1.78. Although he is weakest in mechanics he achieves his greatest gain in this area (2.02 stanines), going from 4.16 on his pre-test to a post-test score of 6.19. Finally, in the area of sentence structure and diction, he shows his smallest gain(1.36 stanines), going from 5.04 on the pre-test to 6.40 on his post-test.

It appears that the average student entering a college freshman composition course shows his greatest strength through the content aspect of his writing and his greatest weakness in mechanics, although he is also quite deficient in organization and sentence structure. At the end of the course he has shown a considerable improvement in all areas of his writing, but particularly in mechanics; yet he is still weakest in this area because he was especially deficient in it to begin with.

VIII. CONCLUSION

The statistics either fully confirmed all of the hypotheses formulated or supported them to a very large extent.

First, a significant range of achievement was evident among the various groups in both the pre-test and post-test. This range reflected varying entrance standards required for the course. The universities, which maintained more rigid entrance standards than did the community colleges, reflected these standards particularly in the pre-test gross(table 1), before any adjustments were made for student dropouts. The mean group score for each university was above any community college score and considerably above the norm. UCLA, which appears to have the most rigid entrance standards of all the groups tested, scored 1.59 stanines above the next highest ranking group, USC, and 2.69 stanines above the norm: a significant difference. Both USC and CSULB scored 1.10 and 1.08 above the norm, respectively. The range between UCLA and the lowest ranking group was 3.82 stanines: a highly significant difference.

Regarding the scores of individual students, table 1 indicates that the universities had only 13 students writing below average from a combined sample of 68--that is, approximately 20%; at the other end of the spectrum they had 29 writing above average--that is, 43%. By contrast, the community colleges had 190 students (almost 25%) writing below average, but only 41(or 10%) writing above average. Furthermore, of those students who scored only 1, which is the lowest possible score indicating writing illiteracy, the universities had only 1, that is, approximately 1 1/2% of the total university sample. By contrast again, the community

colleges exhibited 29 such scores or approximately 12% of their combined sample numbering 416. Percentage wise, then, the colleges had seven times as many minimum scores as did the universities. In short, on the basis of several comparisons, including both mean group stanine scores and individual scores, the universities appear to be skewed to the right in contrast to the community colleges which are skewed in the opposite direction on the pre-test.

A further hypothesis was confirmed. The schools whose enrollments consisted mainly of students from minority groups who were culturally and economically deprived did not achieve as well on the pre-test as did those students from comparatively affluent neighborhoods. The two lowest achieving schools, whose scores were almost identical, were Los Angeles Southwest and Compton, both of which are in predominately minority group neighborhoods. (The enrollment of L.A. Southwest is 99% black; Compton's enrollment is approximately 80% black, with the remainder comprised mainly of Mexican Americans and foreign students from Thailand.) Compton as a group(total) scored 3.29 on the pre-test gross, and L.A. Southwest scored 3.15, both scores of which were 0.84 and 0.98 stanines below the norm, respectively, and 1.12 and 1.26 stanines below the mean total score of Golden West, one of several higher scoring schools in comparatively affluent neighborhoods.

Finally, as hypothesized, toward the end of the semester, by the time the post-test was administered, there was a higher dropout rate among the very low achieving students than there was among the very high achievers, a dropout rate which may have reflected the large class size with its resultant lack of intimacy between student and instructor, and the rigidness of the course itself.

Comparing tables 1 and 3, one notes that of the 30 students who scored only 1 in the pre-test gross, 12 or 30% appeared for the post-test; and of these only 1 survived in a large class: Cypress, whose original enrollment was 58. The remaining 70% had for the most part dropped the course, the researcher learned. Their instructors almost unanimously agreed that despite any objective placement tests or remedial courses these students had taken, they were simply not qualified for the transfer course. Therefore, it appears that the probability of the lowest scoring students even surviving the course let alone passing it was at best 30%.

Similarly, of the 68 students who had scored 2 in the pre-test gross, only 33 or 49% appeared for the post-test, thus indicating an absence/drop rate of more than 51%. Although the researcher was unable to compile the exact dropout rate among these students, he learned that most of them had dropped the course; and again, only 3 survived in a large class: 1 in Golden West(A), whose original enrollment had been 53 students; and 2 in Cypress. It should be noted also that these two groups, Cypress and Golden West(A), offered a very rigid course, which included a formal research paper.

By contrast, of the 22 students who had originally scored 8 or 9 on the pre-test, 21 or 96% appeared for the post-test, thereby indicating a very high probability rate for survival.

In summation, then, the pre-test indicated that the very high scoring students stood a much better chance of surviving the course than did the students who scored very low, the probabilities ranging from 96% to 30% respectively.

The hypotheses for the post-test were all confirmed.

First, there was a gain evident among all of the classes. This gain ranged from a non significant gain of 0.5 stanines for Fullerton, whose sample was too small to be considered reliable, to a highly significant (95% probability) gain of 2.636 stanines for El Camino(B). Fullerton was the only group that did not achieve significant results; two other groups, UCLA and Golden West(B) achieved barely significant results(at the 10% level of confidence--ie., 90% probability); ten groups achieved highly significant results(at the 5% level of confidence--ie., 95% probability); and three groups achieved most significant results (at the 1% level of confidence--ie., 99% probability). The total sample of 285 students(Master) achieved a gain of 1.804 stanines at an infinitesimally high probability, thus confirming the hypothesis. The students did in fact exhibit a significant gain in their writing skills.

As hypothesized, this gain appears to have been directly proportional to three factors: one, the amount of expository writing required for the course; two, the amount of individual conferencing received by the student from his instructor; and three, the intimacy of the class itself and its limited size.

Regarding the reasons hypothesized which appear to have been attributable to the gain, it should be noted, firstly, that the groups showing the greatest gain(2 stanines or better) completed more thesis/support writing assignments than did the other groups. Although the number of assignments has not been included in the tables, the researcher was able to gather the following information.

Of the seven groups showing the greatest gain, all but one had already completed at least 7 assignments before the post-test had been administered. One group, USC, had even completed 9 assignments, and each of the other groups at El Camino had completed 8. Of the three grcups showing the most significant gain, that is, 1% level of confidence, at least two groups had each completed 7 writing assignments. These expository writing assignments were of varying lengths, but approximately half of them were done in class under controlled conditions. Thus, there appears to be a positive correlation between the amount of expository writing completed by the students and the amount and significance of their achievement or gain.

Secondly, conferencing appears to be attributable to a student's achievement in writing skills. Of the seven groups showing the greatest stanine gain, conferencing of all students was mandatory in at least five groups(all El Camino groups, L.A. Southwest(A), and USC), and very strongly recommended in the other two groups. These conferences between student and instructor varied in duration from approximately five or ten minutes during class writing assignments at El Camino and L.A. Southwest to half-hour office conferences three times a semester at USC. Of the three groups showing the most significant results(1% level of confidence), conferencing was mandatory in two groups(L.A. Southwest(B) and Orange Coast), in addition to a weekly lab period required of low achievers at Orange Coast. These conferences mentioned above do not include the numerous, brief discussions, usually held without appointment, between the student and his instructor. Consequently, it appears, as hypothesized, that there is a positive correlation between the

amount of individual conferencing the student received and his improvement in writing skills.

Finally, the intimacy of the class and its small size appear to have a favorable effect upon the student's achievement. Since the class size generally determines to a very large extent the intimacy of the class itself, including its cohesiveness and its receptiveness toward instruction, it can be assumed that the smaller the class size, the more personal or intimate the students become during class discussions, the more effective is the rapport between their instructor and them, all of which results in superior instruction on the part of the instructor and greater achievement for the students, as evidenced by the results. One notes that of the seven groups showing the greatest stanine gain, four were comparatively small groups numbering less than 20 at the time the post-test was administered, two groups numbered 22 and 23, and only one was rather high, numbering 29. Of the three groups showing the greatest significance in their results, all were relatively down in numbers at the time of the post-test, and only one, Golden West(A), had been a very large group originally. Thus, it appears that a student has a much better chance of achieving within a small group than he does within a large group, all other factors being equal.

This study indicates that despite the claims of objective placement tests designed to place students in appropriate composition courses, and remedial courses designed to prepare students for the transfer course, such tests and courses leave much to be desired. It appears that at least 6% of the transfer freshmen tested through essay tests had been misplaced altogether or had been processed through their courses without learning how to write. Their probability of

surviving the transfer course appears to have been only 30%. Another 14% of the students in this study had been misplaced, more than likely, by a probability of 2:1. Only 49% of them survived the course. By contrast, 4 1/2% of the students wrote so well that 96% easily survived the course, and of these students 18% (almost 1% of the total sample tested) appear to have completely mastered all of the items tested.

The universities, both individually and collectively, appear to have received a far greater percentage of highly competent writers than did the community colleges, and a smaller percentage of incompetent and illiterate writers. However, despite these disadvantages, the colleges exhibited results which were superior to those evidenced at the universities. Not only did the community colleges as a group claim a larger gain than could be claimed by the universities, but the significance of their results was also greater. It might be noted, however, that of the three universities tested, two of them(UCLA and CSULB) received several weeks less instruction between the pre-test and post-test than did the community colleges.

Despite the marked increase of 1.889 stanines achieved by the average community college student during his first, fourteen weeks in class, as compared with 1.4 stanines gained by the average university student, it appears that the community college student was 1.48 stanines behind his counterpart at UCLA (or USC), the equivalent of almost one semester's achievement. The average student attending a community college in a minority group neighborhood was even further behind, for these colleges had accepted into their transfer courses a far greater number of incompetent and illiterate writers than had the other schools, according to this study. Consequently, even though

the groups tested at these colleges achieved approximately normal gains, ranging from 1.35--2.0 stanines, their scores were still more than 1 stanine below the norm of all students tested, and more than 2.5 stanines below the group score of the highest groups. It would appear, therefore, that the average student tested in a minority area community college college would require at least twelve weeks of additional instruction and writing just to reach the norm, and approximately one and one-half or two semesters in order to achieve the scores obtained by the highest ranking groups: UCLA, USC, and El Camino.

The study appears to indicate that the student's improvement in writing appears to be correlated positively to three factors: one, the amount of expository writing assignments he completes; two, the amount of individualized conferencing he receives on his writing from his instructor; and three, the intimacy of the class itself, resulting from a smaller class size. Ultimately, almost every student is capable of achieving, and his achievement, as well as his probability for success in the course, can be measured with a very high degree of accuracy by the utilization of essay tests, grading proceedures, and computations similar to those utilized in this study.

IX. SUMMARY

In order to compile a population profile of actual writing skills demonstrated by first-semester freshman composition students during the opening and closing weeks of their courses, a pre-and post-test survey of sixteen classes of freshmen among eight community colleges and three universities in the greater Los Angeles area was conducted by the researcher during the fall semester (or quarter), 1972. Thesis and support essay tests, personally administered by the researcher within fifty-minute class periods, were written by 486 students, 285 of whom returned for the post-test. Controlled conditions also prevailed in the grading of the papers, all of which were sealed for identification, mixed together, then read and graded solely by the researcher. Grading criteria were based upon four equally-weighted items: content, organization, mechanics, and sentence structure(including diction). Each item was graded on the stanine(standard scale of nine), and then the grades were averaged for a composite stanine score--the final score--which was used for both individual and group comparisions.

Both the pre-and post-test results confirmed the hypotheses. The universities, because of their more rigid screening procedures, scored considerably above the norm on the pre-test gross, which included the scores of all of the students tested. UCLA, with a 6.82 stanine score, which was significantly above the norm, headed the list, followed by USC and CSULB, both of which scored considerably but not necessarily significantly below UCLA, and considerably but not significantly above the norm. Fullerton headed the community

colleges, followed by Golden West, Cypress, El Camino and West Los Angeles, all of which scored in the low average stanine range, which appeared to be the norm. Three colleges--Orange Coast, Compton, and Los Angeles Southwest--scored below average. A range of 3.82 stanines separated the lowest scoring group from the highest. Thus, a considerable range was evident not only between some of the community colleges and universities, but among the colleges themselves and between some of the universities themselves.

The post-test results were based on the 2-tail test, which included only those scores from the students who had taken both the pre-and post-tests. Although UCLA again headed the list, this time with a score of 7.81, which is in the much above average range, its margin over four other groups, especially USC and El Camino, was so slight as to be hardly noticeable. However, its margin over the norm was still significant, 1.47 stanines, the equivalent of approximately twelve weeks achievement, based on the average stanine gain of 1.8 exhibited by the norm during the fourteen-week period. The norm had risen from 4.53 stanines on the pre-test to 6.34 on the post-test and was now in the very high average stanine range. The margin between UCLA's score and that of the lowest group was 3.1 stanines, somewhat less than it had been on the pre-test, but still a significant margin, since it represented the equivalent of more than two semesters' gain for the lowest group. The two lowest scoring schools, both more than 1.1 stanines below the norm, were located in minority group neighborhoods which were culturally and economically deprived. The universities as a group scored 1.22 stanines above the community colleges as a group; nevertheless, the colleges achieved both a greater stanine gain than did the universities

and a much greater level of probability in their results. The colleges gained 1.89 stanines compared with 1.4 gained by the universities, and their results were significant at an infinitesimally high probability compared with a 95% probability for the universities.

Groups exhibiting the greatest gains were generally those which had been fairly small in size and had received extensive, individualized essay writing assignments in their courses. All of the groups except one, whose sample was too small to be reliable, showed significant gains, which ranged from 90% probability to 99%. The total sample tested was significant at an infinitesimally high probability level, thus indicating that most of the students did in fact learn certain basic writing skills within fourteen weeks.

The survey indicated that despite the claims of objective placement tests designed to place students in appropriate English composition courses, and despite the goals of remedial courses designed to prepare students for the transfer course, these tests and courses leave much to be desired. Approximately 6% of the transfer freshmen originally tested in this survey had been misplaced altogether and stood less than a 30% chance of surviving their course. Another 14% more than likely had been misplaced since only 49% of them survived. By contrast, 4 1/2% wrote so well on their pre-test, their survival rate proved to be 96%; and 18% of them (less than 1% of the entire sample), all enrolled in the two major universities, obtained perfect writing scores.

X. RECOMMENDATIONS

After having carefully analyzed his study, the researcher would like to make the following recommendations, which he thinks might apply particularly to the area of college freshman composition.

First, instead of an almost total reliance on the scores of objective placement tests and on the grades of remedial courses for the placement of students in appropriate classes, English departments should utilize essay pre-tests, either at the very beginning of the term or in advance. Each instructor could be responsible for testing his own classes, but a department policy might prevail whereby any student who did not exhibit a certain competence in writing ability, perhaps the equivalent of scoring at least 3 on the stanine, should be excluded from the transfer course, unless the course offered additional lab work designed to correct the student's deficiencies.

Second, an arrangement might be implemented whereby the truly superior student in the pre-test, that is, the one who scores at least 8 on the stanine, might challenge the course by taking a two-hour essay exam designed to further test him in his mastery of diverse expository forms. The truly superior student might be better served by taking a more advanced course.

Third, pre-and post-testing of all students in all composition courses--both transfer and remedial--should be mandatory.

Fourth, the maximum class size should be 25 students, but ideally it should be less than 20, in any composition course--transfer or remedial.

Fifth, the minimum writing requirement should be eight essays, half of which should be done in class under controlled conditions, and some of which should be done under the pressure of a fifty-minute time period. The types of exposition assigned, as well as the length of the essay, might vary, but the emphasis should be on a thesis and support type of essay which fulfills the requirements of other courses the student might take, particularly the examination requirements. This requirement might well apply to remedial courses, although for obvious reasons, the remedial student's essay would be more limited in length and quality than would the transfer student's essay.

Sixth, regular conferencing of each student by his instructor in all classes, both remedial and transfer, should be mandatory. The course might be arranged so that the instructor can confer with each student on each completed essay for at least five or ten minutes during in-class writing assignments. If conferencing cannot be arranged during class time, the instructor should be allotted office hours and facilities for conferencing. But conferening, more than any other recommendation, should be mandatory.

Seventh, the research paper should be eliminated as a requirement in freshman composition during the first semester so that the time normally spent on it can be better utilized by the student in learning basic writing skills, particularly skills such as mechanics and sentence structure, which appear to present the greatest difficulty for him.

Eighth, there should be a mandatory requirement among all colleges and universities for a second semester composition course

designed to improve the writing skills of those students who do not achieve an above average score on their essays at the end of the semester. This second-semester composition course should concentrate on expository writing so that the student completing it will be able to write at least as well as the above average student does at the conclusion of the first semester's course. This requirement would be especially beneficial to the average student enrolled in a community college located in a minority group neighborhood.

Ninth, the research paper should be taught as a separate course, but only after the student has learned how to write.

Finally, there should be a much heavier emphasis on the teaching and learning of basic writing skills, beginning at the elementary school level, gradually increasing through the junior high and the high school levels, where class size needs to be drastically reduced, and continuing on through college and university.

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